Medical Center Richmond VA 23249

Veterans Administration

June 20, 1985

In Reply Refer To: 652/115

Material Licensing Branch
Division of Fuel, Cycle and Material Safety
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Sirs:

This is a request for amendment to By-product Material License No. 45-09413-06, to allow disposal by incineration of waste containing small amounts of Sulfur-35.

We have previously received approval to dispose of Carbon-14 and Hydrogen-3 by incineration. The same incinerator will be used. The incinerator is a Brule Pathological "Controlled Air" Hot Hearth Model FG4T-5HP. The rated air flow is 2,352 CFPM.

The incinerator is not less than 100 meters from the nearest inlet for residential unit. Calculations are based on the assumption that all Sulfur-35 is burned and released to the atmosphere through the stack. The incinerator operates 6 hours per day, and usually 5 days per week. Waste containing Sulfur-35 may be burned 2 days a week.

Based on these data, we calculate the maximum allowable activity for incineration as :

Maximum activity per single day =

$9 \times 10^{-9} \times 2352 \times 1.699 \times 10^{6} \times 6 =$ 215 microcuries/day

Maximum activity per year =

$.215 \times 2 \times 52 =$ 22 millicuries/year

Approval is requested for incineration of solid waste containing Sulfur-35, under the above conditions, up to a maximum activity of 22 millicuries per year.

Sincerely yours,

H. T. Haden, M.D.

HALCOTT T. HADEN, M.D.
Chairman, Radioisotope Committee